



In the lower San Pedro basin area, the ground water generally is of good chemical quality with respect to dissolved solids. The dissolved-solids concentrations shown on the map range from 207 to 1,500 mg/L (milligrams per liter). For wells without a chemical analysis, the dissolved-solids values may be estimated by multiplying the specific conductance by 0.66, which is the approximate ratio of dissolved solids to specific conductance. The maximum contaminant level for dissolved solids in public water supplies is 500 mg/L, as proposed in the secondary drinking-water regulations of the U.S. Environmental Protection Agency (1977b, p. 17146) in accordance with provisions of the Safe Drinking Water Act (Public Law 93-523). The U.S. Environmental Protection Agency (1977a, b) has established national regulations and guidelines for the quality of water provided by public water systems. The regulations are either primary or secondary. Primary drinking-water regulations govern contaminants in drinking water that have been shown to affect human health. Secondary drinking-water regulations apply to contaminants that affect esthetic quality. The primary regulations are enforceable either by the Environmental Protection Agency or by the States; in contrast, the secondary regulations are not federally enforceable. The secondary regulations are intended as guidelines for the States. The regulations express limits as "maximum contaminant levels," where contaminant means any physical, chemical, biological, or radiological substance or matter in water.

Fluoride concentrations in water samples from wells and springs in the lower San Pedro basin area ranged from 0.3 to 6.1 mg/L. The maximum contaminant level for fluoride in public water supplies differs according to the annual average maximum daily air temperature (Bureau of Water Quality Control, 1978, p. 6). The annual average maximum daily air temperature in the area is about 62°F, and the maximum contaminant level for fluoride is 1.4 mg/L. Fluoride concentrations in more than a quarter of the water samples exceeded this amount. The large fluoride concentrations are mainly in water from wells along the San Pedro River.

